U.S. Department of the Interior
Bureau of Land Management
White River Field Office
73544 Hwy 64
Meeker, CO 81641

ENVIRONMENTAL ASSESSMENT

NUMBER: CO-110-2005-106-EA

CASEFILE/PROJECT NUMBER: amend COC68613

PROJECT NAME: Connecting pipeline in Canyon Pintado

LEGAL DESCRIPTION: Sixth Principal Meridian,
T.1S., R.101W.,
sec. 18, SE¼SE¼,
sec. 19, NE¼NE¼ .

APPLICANT: Canyon Gas Resources

ISSUES AND CONCERNS: The route crosses the Douglas Creek drainage and State Highway 139, and is located within the Canyon Pintado Historic District.

DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES:

Background/Introduction:

Proposed Action: Canyon Gas proposes to install a buried natural gas pipeline to connect the CDX Big Ridge Central Delivery Point (CDP) to an existing line near the Canyon North Douglas Plant. A meter run, pig launcher, and associated connects will be located at the CDP end. A receiver and associated connections will be located at the plant end.

The pipeline will be up to 6" in diameter and carry approximately 500mscf/d of natural gas to the plant. No compression will be needed. Canyon requests a 30 year grant for a 35 foot right-of-way for 2522 feet for a total of 2.026 acres permanent ROW and an additional 0.441 acres for temporary construction use. Construction will take 3 to 4 weeks and Canyon wishes to begin ASAP. Temporary staging areas would be needed at the tie-in points and at the highway crossing.

An on-site visit was held 4/28/05. Canyon identified several specific plans. The line from the West side of the Douglas Creek drainage will be buried down the bank to the lower level next to Douglas Creek for boring under the channel. They will brush hog the work area and begin boring at least 40 feet from the stream bed. A trackhoe, borer, and sideboom will be used in the

crossing area. They will need a 60' by 60' temporary work area on the west side and a 60'x 100' area on the east side. The line will then parallel (at 10 feet) Highway 139 to the north and set up a second bore under the highway. Similar work areas will be needed for the highway bore. A larger gulch near the CDX end may be bored. There will be no valves needed as they will use pigs. The CDX pipeline will come out from their lease to connect to the new Canyon line.

The application included a Plan of Development (POD) which is attached and incorporated by reference. The POD addresses the following concerns:

1. Technical regulations and requirements for pipeline construction.
2. Other required permits, Army Corps of Engineers Verification, Colorado Stormwater Permit, Wastewater Discharge Permit, and CDOT Special Use Permit.
3. Resource Values and Environmental Concerns including noxious weed control; erosion and soil conditions; surveys for T&E species, biological and cultural resources, as required by BLM;
4. Construction, including access – no new access required; equipment; fire control; clearing and grading; road and drainage crossings including riparian; testing; and spills and leaks.
5. Stabilization, Reclamation, and Revegetation
6. Termination and Restoration
7. Waste Disposal
8. Hazardous Materials
9. Safety and management
10. Performance standards

No Action Alternative: The pipeline would not be authorized or constructed.

ALTERNATIVES CONSIDERED BUT NOT CARRIED FORWARD:

NEED FOR THE ACTION: Canyon Gas needs to install this connecting pipeline to deliver natural gas from the CDX Big Ridge Central Delivery Point to the North Douglas plant for treatment and further delivery.

PLAN CONFORMANCE REVIEW: The Proposed Action is subject to and has been reviewed for conformance with the following plan (43 CFR 1610.5, BLM 1617.3):

Name of Plan: White River Record of Decision and Approved Resource Management Plan (ROD/RMP).

Date Approved: July 1, 1997

Decision Number/Page: Pages 2-49 thru 2-52

Decision Language: "Objective: To make public lands available for the siting of public and private facilities through the issuance of applicable land use authorizations, in a manner that provides for reasonable protection of other resource values."

AFFECTED ENVIRONMENT / ENVIRONMENTAL CONSEQUENCES / MITIGATION MEASURES:

STANDARDS FOR PUBLIC LAND HEALTH: In January 1997, Colorado Bureau of Land Management (BLM) approved the Standards for Public Land Health. These standards cover upland soils, riparian systems, plant and animal communities, threatened and endangered species, and water quality. Standards describe conditions needed to sustain public land health and relate to all uses of the public lands. Because a standard exists for these five categories, a finding must be made for each of them in an environmental analysis. These findings are located in specific elements listed below:

CRITICAL ELEMENTS

AIR QUALITY

Affected Environment: No special designation air sheds or non-attainment areas are located within a ten mile radius of the proposed pipeline location. The proposed action will have little effect on air quality in the area with the exception of dry periods when gusty winds may temporarily increase fugitive dust levels.

Environmental Consequences of the Proposed Action: Removal of ground cover will leave soils vulnerable to eolian processes until mitigation is complete. Elevated levels of fugitive dust would be a direct product of strong winds in combination with dry conditions. However, airborne particulate matter should not exceed Colorado air quality standards on an hourly or daily basis.

Environmental Consequences of the No Action Alternative: None

Mitigation: Noting observations made in the field, a large portion of the pipeline (roughly 90%) cuts through heavy brush. To mitigate potential increased levels of fugitive dust, it is recommended that a portion of the vegetation removed during construction be re-applied as ground cover after construction is complete.

CULTURAL RESOURCES

Affected Environment: The proposed pipeline route is in an area that has had Class III (100% pedestrian) inventories over a number of years (Conner 1977, Compliance Dated 7/05/1977, Creasman 1981, Compliance Dated 1981, Hand 1989, Compliance Dated 8/29/1989). Inventory work has noted two sites in the vicinity of the proposed pipeline. As currently shown on the application it appears that the sites (5RB 697 and 4565) will be avoided.

However, there is still a potential for buried remains to be found along the flood plain and first terrace of Douglas Creek.

Environmental Consequences of the Proposed Action: The proposed action will not impact any known cultural resources though there is a potential for impacting previously unknown buried remains.

Environmental Consequences of the No Action Alternative: There would be no new impacts to cultural resources under the No Action Alternative.

Mitigation: An archaeological monitor shall be required for all trenching in the floodplain and first terrace areas of Douglas Creek. If resources are identified the monitor shall immediately shut down all construction activity and notify the White River Field Office Authorized Office (Field Manager or the Acting).

INVASIVE, NON-NATIVE SPECIES

Affected Environment: The project site primarily consists of two vegetation types, with greasewood, sagebrush, cheatgrass and annual forbs dominating the upland communities. The bottom communities contain tamarisk, willows and a variety of grasses and forbs. Noxious weeds of concern include: tamarisk, Canada thistle, hoary cress, cheatgrass and burdock. All of these noxious weed species can be found along Main Stem Douglas Creek.

Environmental Consequences of the Proposed Action: The proposed project will disturb the above vegetation types. Clearing of the vegetation using a brush hog will not kill or change the distribution of willows or tamarisk. Where the pipeline is trenched into the ground there will be removal of plants by the roots, and there would be a loss of vegetation until reclamation is completed. On these disturbed sites there is the opportunity for noxious weeds to establish. With control of the weeds by the operator there would not be any adverse impacts.

Environmental Consequences of the No Action Alternative: There would be no change in the existing situation.

Mitigation: The permit holder is required to control noxious weeds resulting from this project. Use of herbicides is to be in accordance with the label and approved in advance by the authorized officer.

MIGRATORY BIRDS

Affected Environment: The project area is encompassed by greasewood and basin big sagebrush with cheatgrass, pepperweed and perennial grasses comprising much of the understory. Salt cedar, scattered willows and annual grasses represent the vegetation community along the Douglas channel. This portion of Douglas Creek supports a low density contingent of riparian-affiliated (willow and tamarisk) migratory birds, including: song sparrow, yellow warbler, yellow-breasted chat, blue grosbeak, and lazuli bunting. The greasewood/sage communities typically support species such as meadowlark, lark sparrow, and horned lark. The majority of the pipeline lies within 300 ft of a well traveled corridor (Hwy 139)

Environmental Consequences of the Proposed Action: The proposed pipeline is scheduled for construction during the month of June, which would be synchronous with much of the migratory bird nesting season. Virtually all potentially affected upland habitats are lower density shrublands with poorly developed, annual-dominated understories situated within a few hundred feet of active well pads and their access roads and State Highway 139. These habitats support little migratory bird nesting activity, particularly birds of higher conservation interest (e.g., Brewer's sparrow). It is unlikely that more than 2 nesting efforts of more common and widespread species would be adversely influenced by proposed construction.

The corridor selected across the Douglas Creek incise is dominated by greasewood, basin big sagebrush, and tamarisk—a habitat complex that is occupied predominantly by song sparrow, yellow warbler, and blue-gray gnatcatcher. Few, if any birds affiliated with better-developed riparian communities (e.g., blue grosbeak, chat) would be expected in the project area. Based on the short bisect of the Douglas Creek channel, breeding attempts of no more than 6 more common riparian or shrub-scrub species would likely be affected, with no more than one nesting effort of the more highly specialized species being involved.

Environmental Consequences of the No Action Alternative: There would be no affect on migratory birds under the no action alternative.

Mitigation: None

THREATENED, ENDANGERED, AND SENSITIVE ANIMAL SPECIES (includes a finding on Standard 4)

Affected Environment: There are no threatened, endangered or sensitive animal species that inhabit or derive important benefit from the area potentially influenced by the proposed action.

Environmental Consequences of the Proposed Action: The proposed action would have no conceivable influence on animals listed, proposed, candidate, or petitioned for listing under the Endangered Species Act. Similarly, there are no animals considered sensitive by BLM that would be potentially influenced by this action.

Environmental Consequences of the No Action Alternative: There would be no conceivable influence on special status species under the no action alternative.

Mitigation: None

Finding on the Public Land Health Standard for Threatened & Endangered species: The proposed and no action alternatives would have no effective influence on populations or habitat associated with special status species and would be consistent with the long term maintenance of animal and plant land health standards.

WASTES, HAZARDOUS OR SOLID

Affected Environment: There are no known hazardous or other solid wastes on the subject lands. No hazardous materials are known to have been used, stored or disposed of at sites included in the project area.

Environmental Consequences of the Proposed Action: No listed or extremely hazardous materials in excess of threshold quantities are proposed for use in this project. While commercial preparations of fuels and lubricants proposed for use may contain some hazardous constituents, they would be stored, used and transported in a manner consistent with applicable laws, and the generation of hazardous wastes would not be anticipated. Solid wastes would be properly disposed of.

Environmental Consequences of the No Action Alternative: No hazardous or other solid wastes would be generated under the no-action alternative.

Mitigation: The applicant shall be required to collect and properly dispose of any solid wastes generated by the proposed actions.

WATER QUALITY, SURFACE AND GROUND (includes a finding on Standard 5)

Affected Environment: Surface Water: The proposed action is located in the Douglas Creek catchment area which is a tributary to the White River. A review of the Colorado's 1989 Nonpoint Source Assessment Report (plus updates), the 305(b) report, the 303(d) list and the Unified Watershed Assessment was done to see if any water quality concerns have been identified. The State has classified stream segment 22 of the White River Basin as "Use Protected" and further designated as beneficial for the following uses: Warm Aquatic Life 2, Recreation 1b, and Agriculture. The antidegredation review requirements in the Antidegredation Rule are not applicable to waters designated use-protected. For those waters, only the protection specified in each reach will apply. For this reach, minimum standards for four parameters have been listed. These parameters are: dissolved oxygen = 5.0 mg/l, pH = 6.5 - 9.0, Fecal Coliform = 325/100 ml, and 205/100 ml E. coli.

Temporary use areas (TUAs) used for the boring process will be situated at least 40’ from the stream channel (as addressed in the field). The TUA located on the west side of Douglas Cr. will be located in the active flood plain while the adjacent TUA will be located on the high terrace.

Ground Water: The proposed pipeline will run subsurface from its origin on the east side of the highway to the pig-launching site on the west side of Douglas Creek. Local ground water recharging Douglas Creek may be encounter while boring beneath the stream channel.

Environmental Consequences of the Proposed Action: Removal of ground cover while constructing the pipeline will leave soils exposed to erosional processes such as raindrop impact and overland flows. The buried pipeline may disrupt local ground water recharge if a shallow

confining layer is ruptured during construction. In addition, use of heavy equipment in temporary use areas (TUAs) near the stream channel may compromise stream bank stability.

Environmental Consequences of the No Action Alternative: None

Mitigation: An in the field assessment was conducted analyzing possible mitigation steps aimed at reducing adverse environmental consequences. In the field it was recommended that temporary use areas (TUAs) be situated at least 40' from the stream channel to minimize impacts on channel bank stability. In addition, a "Brush Hog" will be used to clear vegetation in areas needed for additional work space (this would allow root wads to remain intact). TUAs will be in use only during periods of low flow (well below bank-full stage) in attempts to prevent deterioration of the flood plane on west bank. In addition, TUAs will be revegetated and debris will be evenly distributed over the area to enhance flood plain stability. The remaining portion of the pipeline will also be revegetated and covered with debris to slow erosional processes.

While boring beneath Douglas Creek, a minimum burial depth of 10' will be required in attempts to preserve confining layers. In addition, the small ephemeral drainage (dimensions 5'wide X 2' deep) on the east side of the highway will have the same burial depth requirements. At locations next to or crossing access roads, a minimum burial depth of four feet in alluvial areas and three feet in rocky areas will be obtained.

Finding on the Public Land Health Standard for water quality: At present, water quality in stream segment 22 (main Douglas Creek) dose not meets standards set by the state for suspended sediment and salinity. Following pipeline construction, slight increased sediment loads to Douglas Creek will result until reclamation is successfully completed. However, following successful reclamation, water quality for stream segment 22 should not be greatly impacted by the proposed actions.

WETLANDS AND RIPARIAN ZONES (includes a finding on Standard 2)

Affected Environment: Riparian character along this portion of Douglas Creek is dominated by tamarisk with poorly developed, annual-dominated understories. A narrow (average 5 foot either side of channel) margin along the wetted channel supports a simple riparian community comprised of low density coyote willow, and patchily distributed rushes among a predominant bluegrass and quackgrass sod. In spite of its largely weedy character, this meandering, low gradient channel is considered to be in proper functioning condition and is largely immune from flood damage (i.e., bank erosion and downcutting events).

Environmental Consequences of the Proposed Action: Pipeline installation at the Douglas Creek crossing would involve boring beneath the channel bed and its associated riparian margins. Avoiding any disruption of the channel, channel banks, and lower floodplain at the project site would eliminate any effective influence (e.g., siltation, bank instability, vegetation clearing) on on-site or downstream channel conditions. Although staging areas and access approach would be situated on active floodplain terraces, these communities are dominated by

tamarisk and annual weeds. Temporary surface disturbance of these broad, low gradient sites would have no functional consequence on their stability or capacity to capture and retain sediments. Subsequent reclamation offers opportunity to improve ground cover composition on these floodplain features with perennial bunchgrasses.

Environmental Consequences of the No Action Alternative: There would be no action authorized that would have potential to influence channel features or aquatic habitats.

Mitigation: During the on-site inspection, it was agreed to by all parties that no construction activity, vehicle use, or vegetation clearing would occur within 40 feet of the active channel margin (i.e., both sides of channel).

Finding on the Public Land Health Standard for riparian systems: Regardless of its large introduced and weedy species component, the Douglas Creek system is considered to be proper functioning condition. Channel stability, floodplain access, and vegetation composition (i.e., sedge, willow) are in a long-term upward trend and fully meet the intent of the Public Land Health Standards. This project, as proposed and conditioned, would have no influence on channel features or function and would involve only temporary and small-scale disruption of shrub-scrub vegetation. Reclamation, on a localized basis, would help reduce the prevalence of annual weedy species on adjacent floodplain terraces. The proposed and no-action alternative would both be consistent with continued meeting of the Riparian Land Health Standards.

WILDERNESS

Affected Environment: The proposed pipeline is located adjacent to the Big Ridge Citizens Wilderness Proposal (BRCWP).

Environmental Consequences of the Proposed Action: The proposed action is not in the BRCWP; therefore qualities of potential wilderness character would not be jeopardized. There will be an increase in use during the construction period; returning to pre-construction usage once the pipeline is completed.

Environmental Consequences of the No Action Alternative: none.

Mitigation: none

CRITICAL ELEMENTS NOT PRESENT OR NOT AFFECTED:

No ACEC's, flood plains, prime and unique farmlands, or Wild and Scenic Rivers, threatened, endangered or sensitive plants exist within the area affected by the proposed action. For threatened, endangered and sensitive plant species Public Land Health Standard is not applicable since neither the proposed nor the no-action alternative would have any influence on populations

of, or habitats potentially occupied by, special status plants. There are also no Native American religious or environmental justice concerns associated with the proposed action.

NON-CRITICAL ELEMENTS

The following elements **must** be addressed due to the involvement of Standards for Public Land Health:

SOILS (includes a finding on Standard 1)

Affected Environment: The following data is a product of an order III soil survey conducted by the NRCS. The accompanying table highlights important soil characteristics. A complete summary of this information can be found at the White River Field Office.

Soil Number	Soil Name	Slope	Ecological site	Salinity	Run Off	Erosion Potential	Bedrock
74	Rentsac-Moyerson-Rock Outcrop complex	5-65%	PJ Woodlands/Clayey Slopes	<2	Medium	Moderate to very high	10-20
89	Tisworth fine sandy loam	0-5%	Alkaline Slopes	>4	Rapid	Moderate	>60
90	Torrifluvents, gullied		None		Rapid	Very high	>60

74-Rentsac-Moyerson-Rock outcrop complex (5 to 65 percent slopes) can be found on foothills and ridges. Areas are irregular in shape and are 160 to 5,000 acres in size. The native vegetation is mainly pinyon and juniper trees with an understory of shrubs and grasses.

This unit is 40 percent Rentsac channery loam that has slopes of 5 to 50 percent, 25 percent Moyerson stony clay loam that has slopes of 15 to 65 percent, and 20 percent Rock outcrop that has slopes of 5 to 65 percent. The Moyerson soil is mainly in the lower lying areas of the unit. The components of this unit are so intricately intermingled that it was not practical to map them separately at the scale used.

Included in this unit are small areas of Blazon channery clay loam, Bulkley channery silty clay loam, Dollard silty clay loam, Redcreek sandy loam, and Yamac loam. Also included are small areas of soils that are similar to the Rentsac and Moyerson soils but are moderately deep to sandstone or shale. Included areas make up about 15 percent of the total acreage. The percentage varies from one area to another.

The Rentsac soil is shallow and well drained. It formed in residuum derived dominantly from sandstone. Typically, the surface layer is grayish brown channery loam about 5 inches thick. The next layer is brown very channery loam about 4 inches thick. The underlying material is very pale brown extremely flaggy loam 7 inches thick. Sandstone is at a depth of 16 inches. Depth to sandstone ranges from 10 to 20 inches. In some areas the surface layer is quite variable in texture.

Permeability of the Rentsac soil is moderately rapid. Available water capacity is very low. Effective rooting depth is 10 to 20 inches. Runoff is medium, and the hazard of water erosion is moderate to very high.

The Moyerson soil is shallow and well drained. It formed in residuum derived dominantly from shale. Typically, the surface layer is light gray stony clay loam about 2 inches thick. The next layer is gray clay loam about 8 inches thick. The underlying material is gray clay 7 inches thick. Shale is at a depth of 17 inches. Depth to shale ranges from 10 to 20 inches. In some areas the surface layer is silty clay loam, silty clay, light clay, or bouldery clay loam.

Permeability of the Moyerson soil is slow. Available water capacity is low. Effective rooting depth is 10 to 20 inches. Runoff is medium to rapid, and the hazard of water erosion is very high.

Rock outcrop consists of ridge caps, ridge points, and long vertical bluffs 3 to 25 feet thick and 25 to 1,500 feet long.

The potential plant community on the Rentsac soil is mainly pinyon and juniper trees with a sparse understory of Indian ricegrass, beardless wheatgrass, mountain mahogany, big sagebrush, prairie junegrass, and bitterbrush. The potential plant community on the Moyerson soil is mainly Salina wild rye, shadscale, Sandberg bluegrass, Indian rice grass, galleta, and bottlebrush squirreltail. The production of forage is limited by low precipitation, restricted rooting depth, and steepness of slope

89-Tisworth fine sandy loam (0 to 5 percent slopes) is a deep, well drained soil found primarily on valley floors and broad fans. It formed in alluvium derived dominantly from sedimentary rock with a high content of gypsum and alkaline salt. Areas are elongated and are 30 to 300 acres. The native vegetation is mainly salt-tolerant shrubs and grasses.

Typically, the surface layer is pale brown fine sandy loam 4 inches thick. The subsoil is light yellowish brown clay loam 7 inches thick. The upper 9 inches of the underlying material is very pale brown fine sandy loam that has fine crystals and seams of gypsum and calcium carbonate, and the lower part to a depth of 60 inches or more is very pale brown fine sandy loam. In some areas the surface layer is loam or clay loam.

Included in this unit are small areas of Absher and Havre loams, Kobar silty clay loam, Moyerson clay loam, and Patent and Trembles loams. Also included are small areas of soils that are similar to this Tisworth soil but are severely gullied and soils that have slightly steeper slopes. Included areas make up about 15 percent of the total acreage. The percentage varies from one area to another.

Permeability of this Tisworth soil is slow. Available water capacity is moderate. Effective rooting depth is 60 inches or more. Runoff is rapid, and the hazard of water erosion is moderate.

The potential plant community on this unit is mainly greasewood, big sagebrush, Nevada bluegrass, western wheatgrass, bottlebrush squirreltail, and shadscale. Smaller amounts of winterfat and rabbit brush commonly are also present in the potential plant community. The production of forage is limited by low precipitation, rapid runoff, alkalinity, and a short growing season.

If this unit is seeded, the main limitations are low precipitation in summer, alkalinity, and the hazard of erosion. For successful seeding, prepare a seedbed and drill in the seed. The plants selected for seeding should meet the seasonal requirements of livestock or wildlife, or both. Salt- and alkali-tolerant grasses are best suited to this unit.

90-Torrifluvents is located along narrow valley bottoms, in swales, and on eroded fans. Slope is 0 to 5 percent. Areas are long and narrow or irregular in shape and are 40 to 200 acres in size. The native vegetation is mainly sparse desert shrubs and annual grasses.

This unit is 80 percent Torrifluvents that are characterized by gullies and head cuts 3 to 35 feet deep and 5 to 150 feet wide.

Torrifluvents are moderately deep and are well drained and somewhat excessively drained. They formed in highly calcareous and gypsiferous, stratified sandy, loamy, and clayey alluvium derived dominantly from sandstone and shale.

Included in this unit are small areas of Absher loam, Billings silty clay loam, Chipeta silty clay loam, Glenton sandy loam, Havre loam, Tisworth fine sandy loam, Turley fine sandy loam, and Uffens loam.

Permeability of the Torrifluvents is moderately rapid to slow. Available water capacity is moderate to high. Effective rooting depth is 60 inches or more. Runoff is rapid, and the hazard of water erosion is very high, which results in high production of sediment during rainstorms and periods of snowmelt.

Environmental Consequences of the Proposed Action: Reduction in vegetal cover will temporarily increase soil vulnerability to erosional processes. Torrifluvents soils (located primarily on the west bank of Douglas Creek) are very susceptible to erosion given they are highly calcareous and gypsiferous. If left exposed to weathering processes, Torrifluvents will increase sediment loads directly into Douglas Creek. Tisworth soils (also high in gypsum and alkaline salts) may also contribute to erosional problems on both sides of the highway. Due to the impoundment created by the location of Highway 139, increased sediment loads originating on the east side of the highway will result in increased rates of aggradation at that location.

Environmental Consequences of the No Action Alternative: None

Mitigation: It is recommended that a "Brush Hog" be used to clear work space required in construction. The use of the "Brush Hog" will leave root-wads intact increasing soil stability. Utilization of bio-degradable netting (e.g. jute) may be necessary to reduce erosion at the point the pipeline route climbs the highest cut-bank to the west of Douglas Creek. Special care must

also be given to gullies intersected by the pipeline near the highest cut-bank to the west of Douglas Creek. At these locations it is suggested that the pipeline route be armored with woody debris or cobbles to prevent accelerated gully erosion.

Revegetate disturbed areas and evenly distribute flow deflectors and sediment traps (debris) over pipeline route immediately following construction. The use of salt and alkali tolerant plant species such as greasewood, big sagebrush, Nevada bluegrass, western wheatgrass, bottlebrush squirrel-tail, and shad-scale will improve revegetation efforts Tisworth soils (east of the highway).

Finding on the Public Land Health Standard for upland soils: The proposed actions will not severely compromise soil health. Following proper mitigation, infiltration and permeability rates should remain constant and support healthy riparian communities.

VEGETATION (includes a finding on Standard 3)

Affected Environment: The project site is primarily two vegetation types, with greasewood, sagebrush, cheatgrass and annual forbs dominating the upland communities. The bottom communities contain tamarisk, willows and a variety of grasses and forbs.

Environmental Consequences of the Proposed Action: The proposed project will disturb the above vegetation types. Clearing of the vegetation using a brush hog will not kill or change the distribution of willows or tamarisk. Where the pipeline is trenched into the ground there will be removal of plants by the roots, and there would be a loss of vegetation until reclamation is completed. On these disturbed sites there is the opportunity for noxious weeds to establish. With control of the weeds by the operator there would not be any adverse impacts.

Environmental Consequences of the No Action Alternative: There would be no change in the existing situation.

Mitigation: Distubed areas will be seeded with standard seed mix 1, which is well adapted to the austere site conditions, has the greatest opportunity to hold the soil, and will allow native species to move onto the site as soils develop. This seed mix has not been found to move offsite or to interbreed with adjacent native plant species.

Finding on the Public Land Health Standard for plant and animal communities (partial, see also Wildlife, Aquatic and Wildlife, Terrestrial)*:* Both of the plant communities involved have characteristics which would classify them as not meeting the standard. The proposed project would not improve the opportunity for meeting the standard nor cause a reduction in the ability to meet the standard.

WILDLIFE, AQUATIC (includes a finding on Standard 3)

Affected Environment: This portion of Douglas Creek supports a higher order aquatic system attributable primarily to occupation by beaver. It is uncertain whether this reach is occupied by fish (i.e., typically by speckled dace, a native non-game fish), but is likely to support a number of other vertebrate forms, including: northern leopard frog, waterfowl, and muskrat.

Environmental Consequences of the Proposed Action: Pipeline installation at the Douglas Creek crossing would involve boring beneath the channel bed and its associated riparian margins. Avoiding any disruption of the channel, channel banks, and lower floodplain at the project site would eliminate any effective influence (e.g., siltation, bank instability, vegetation clearing) on on-site or downstream aquatic habitat conditions. Although staging areas and access approach would be situated on active floodplain terraces, these communities are dominated by tamarisk and annual weeds. Temporary surface disturbance of these broad, low gradient sites would have no functional consequence on their stability or capacity to capture and retain sediments. Subsequent reclamation offers opportunity to improve ground cover composition on these floodplain features with perennial bunchgrasses.

Environmental Consequences of the No Action Alternative: There would be no action authorized that would have potential to influence channel features or aquatic habitats.

Mitigation: See Riparian section above.

Finding on the Public Land Health Standard for plant and animal communities (partial, see also Vegetation and Wildlife, Terrestrial): This reach of Douglas Creek currently possesses modest aquatic habitat utility and because it is progressing toward a properly functioning condition, meets the land health standard. As proposed and conditioned, this action is not expected to detract from the utility or continued rejuvenation of aquatic habitat conditions.

WILDLIFE, TERRESTRIAL (includes a finding on Standard 3)

Affected Environment: The project area is broadly encompassed by greasewood and basin big sagebrush with pepperweed, cheatgrass, mustard and perennial grasses comprising the majority of the understory. Salt cedar, annual grasses and scattered willow represent the vegetation community along the Douglas channel. This area normally represents general winter range for deer, but the utility of the project area in providing big game forage or cover is severely compromised by its lack of preferred woody and herbaceous forages and its close proximity to the State Highway.

Rim rock upland/outcrops along the corridor exhibit high raptor nesting potential and are near enough to be influenced by disturbance. However, no evidence of use was observed during a field visit by BLM biologists in late April. There are no suitable nest trees for raptor species within the vicinity of the project area.

Environmental Consequences of the Proposed Action: The proposed action is not expected to result in any adverse effects to terrestrial wildlife. Construction of the proposed pipeline will result in the removal of approximately 2 acres of vegetation, much of which is ignored by big game as forage (e.g., greasewood and basin big sagebrush). Subsequent

reclamation of the pipeline corridor and staging areas would promote improvements in ground cover composition (especially perennial bunchgrasses) that would lead to incremental benefits for big game, particularly during late fall and early spring.

Environmental Consequences of the No Action Alternative: There would be no influence on terrestrial wildlife or habitats under the no action alternative.

Mitigation: None

Finding on the Public Land Health Standard for plant and animal communities (partial, see also Vegetation and Wildlife, Aquatic): The project site meets the land health standard for terrestrial communities. The project as proposed would have no functional influence on attributes of community health.

OTHER NON-CRITICAL ELEMENTS: For the following elements, only those brought forward for analysis will be addressed further.

Non-Critical Element	NA or Not Present	Applicable or Present, No Impact	Applicable & Present and Brought Forward for Analysis
Access and Transportation			X
Cadastral Survey	X		
Fire Management	X		
Forest Management	X		
Geology and Minerals	X		
Hydrology/Water Rights	X		
Law Enforcement		X	
Noise		X	
Paleontology			X
Rangeland Management			X
Realty Authorizations			X
Recreation		X	
Socio-Economics		X	
Visual Resources			X
Wild Horses	X		

ACCESS AND TRANSPORTATION

Affected Environment: The proposed action occurs within an area designated as Designated Roads, Trails, and Ways. The main access will be via Colorado State Highway 139. There will be construction traffic using West Fourmile Draw road and access to the CDX Big Ridge CDP for the 3-4 week construction period.

Environmental Consequences of the Proposed Action: Because the pipeline will be bored for the crossing of State Highway 139, there will be minimal impact to other traffic. There will be additional equipment traffic, but only during construction as they will use pigging operations for maintenance.

Environmental Consequences of the No Action Alternative: None

Mitigation: None

PALEONTOLOGY

Affected Environment: The proposed pipeline route is located in an area mapped as part of the Mesa Verde Formation, which the BLM has classified as a Condition I formation meaning it is known to produce scientifically important fossil resources. However, the bulk of the project appears to lie in an area where quaternary alluvium is present at the surface. Quaternary alluviums are generally not expected to produce fossils of scientific importance.

Environmental Consequences of the Proposed Action: As long at all trench excavation activities are confined to the quaternary alluviums there is little or no likelihood of impacts to scientifically important fossils. However, if it becomes necessary to excavate into the underlying bedrock formation there is a potential to impact fossil resources.

Environmental Consequences of the No Action Alternative: There would be no new impacts to fossil resources under the No Action Alternative.

Mitigation: 1. The operator is responsible for informing all persons who are associated with the project operations that they will be subject to prosecution for knowingly disturbing paleontological sites, or for collecting fossils. If fossil materials are uncovered during any project or construction activities, the operator is to immediately stop activities in the immediate area of the find that might further disturb such materials, and immediately contact the authorized officer (AO). Within five working days the AO will inform the operator as to:

- whether the materials appear to be of noteworthy scientific interest
- the mitigation measures the operator will likely have to undertake before the site can be used (assuming in situ preservation is not feasible)

If the operator wishes, at any time, to relocate activities to avoid the expense of mitigation and/or the delays associated with this process, the AO will assume responsibility for whatever recordation and stabilization of the exposed materials may be required. Otherwise, the operator will be responsible for mitigation cost. The AO will provide technical and procedural guidelines for the conduct of mitigation. Upon verification from the AO that the required mitigation has been completed, the operator will then be allowed to resume construction.

2. If it becomes necessary to excavate into the underlying rock formation, a paleontological monitor shall be required and present during the excavations.

RANGELAND MANAGEMENT

Affected Environment: The proposed project occurs on the allotment boundary between the Twin Buttes allotment and the Cathedral Bluffs allotment. Both of these allotments use the project area during the winter and spring period with cattle. On the Cathedral (east) side the corridor between the rim rocks and the highway right-of-way fence is a major trailing route between the winter and summer ranges. The Twin Buttes side does not trail along Douglas Creek in this area.

Environmental Consequences of the Proposed Action: If the highway right-of-way fences are maintained in their current condition there would be no impacts to the Twin Buttes livestock operation. If construction were to occur during the early winter and early spring there would be problems with moving livestock around the construction site. If the mitigation listed below is adhered to there would be no impacts.

Environmental Consequences of the No Action Alternative: No impacts.

Mitigation: Construction would not occur during the months of December, March or April to allow for livestock movements.

REALTY AUTHORIZATIONS

Affected Environment: The pipeline will be entirely on public lands and will cross State Highway 139 (COC57457). Also within the area are linear ROWs for Public Service Company (COC019253), CenturyTel (COC3435 and 26096), CDX (COC 65353 and 67911), Moon Lake COC27592 and 102645) BP America (COC58306) Locin (COC54678) NorthWest Pipeline (COC011243), and other Canyon Gas lines.

Environmental Consequences of the Proposed Action: The pipeline will be authorized under COC 68613.

Environmental Consequences of the No Action Alternative: The construction would not be authorized or constructed and there would be no resulting impacts.

Mitigation: Colorado One Call must be activated before excavation begins.

VISUAL RESOURCES

Affected Environment: The proposed action would be located within a VRM class III area. The objective of this class is to partially retain the existing character of the landscape. The level of change to the characteristic landscape should be moderate.

Management activities may attract attention but should not dominate the view of the casual observer. Changes should repeat the basic elements found in the predominant natural features of the characteristic landscape.

Environmental Consequences of the Proposed Action: The proposed action would be visible to a casual observer traveling along state highway 139 for a brief period of time as the highway crosses the buried pipeline. Any above ground facilities would be painted an environmental color to blend with existing adjacent vegetation and would not dominate the view of the casual observer. The level of change to the characteristic landscape would be low and the objectives of the VRM III classification would be retained.

Environmental Consequences of the No Action Alternative: No impact.

Mitigation: Paint all above ground facilities Juniper Green.

CUMULATIVE IMPACTS SUMMARY: Cumulative impacts from oil and gas development were analyzed in the White River Resource Area Proposed Resource Management Plan/Final Environmental Impact Statement (PRMP/FEIS) completed in June 1996. Current development, including the proposed action, has not exceeded the cumulative impacts from the foreseeable development analyzed in the PRMP/FEIS.

REFERENCES CITED:

Conner, Carl E.
1977 Antiquities Inventory for Chandler and Associates: The North Douglas Creek Project. The Antiquities Research Division, Historical Museum and Institute, Grand Junction, Colorado.

Creasman, Steven D.
1981 Archaeological Inventigations in the Canyon Pintado Historic District, Rio Blanco County, Colorado: Phase I- Inventory and Test Excavations. Reports of the Laboratory of Public Archaeology No 34, February 1981. Laboratory of Public Archaeology, Colorado State University, Fort Collins, Colorado.

Hand, O. D.
1989 Archaeological Survey of the Canyon Pintado Historic District Along State Highway 139, Rio Blanco County, Colorado. Archaeological Unit, Colorado Department of Highways, Denver, Colorado.

Tweto, Ogden
1979 Geologic Map of Colorado. United States Geologic Survey, Department of the Interior, Reston, Virginia.

PERSONS / AGENCIES CONSULTED:
The Proposed Action was presented to the White River Field Office NEPA ID Team on March 21, 2005. A list is on record and available at the White River Field Office.

INTERDISCIPLINARY REVIEW:

Name	Title	Area of Responsibility
Nate Dieterich	Hydrologist	Air Quality
Tamara Meagley	NRS	Areas of Critical Environmental Concern
Tamara Meagley	NRS	Threatened and Endangered Plant Species
Michael Selle	Archaeologist	Cultural Resources Paleontological Resources
Robert Fowler	Forester	Invasive, Non-Native Species
Lisa Belmonte	Wildlife Biologist	Migratory Birds
Lisa Belmonte	Wildlife Biologist	Threatened, Endangered and Sensitive Animal Species
Bo Brown	Hazmat Collateral	Wastes, Hazardous or Solid
Nate Dieterich	Hydrologist	Water Quality, Surface and Ground Hydrology and Water Rights
Lisa Belmonte	Wildlife Biologist	Wetlands and Riparian Zones
Linda Jones	Realty Specialist	Wilderness
Nate Dieterich	Hydrologist	Soils
Robert Fowler	Forester	Vegetation
Lisa Belmonte	Wildlife Biologist	Wildlife Terrestrial and Aquatic
Linda Jones	Realty Specialist	Access and Transportation
Ken Holsinger	Natural Resource Specialist	Fire Management
Robert Fowler	Forester	Forest Management
Paul Daggett	Mining Engineer	Geology and Minerals
Robert Fowler	Forester	Rangeland Management
Linda Jones	Realty Specialists	Realty Authorizations
Linda Jones	Realty Specialist	Recreation
Keith Whitaker	Natural Resource Specialist	Visual Resources
Valerie Dobrich	Natural Resource Specialist	Wild Horses

Finding of No Significant Impact/Decision Record (FONSI/DR)

CO-110-2005- -EA

FINDING OF NO SIGNIFICANT IMPACT (FONSI)/RATIONALE: The environmental assessment and analyzing the environmental effects of the proposed action have been reviewed. The approved mitigation measures (listed below) result in a Finding of No Significant Impact on the human environment. Therefore, an environmental impact statement is not necessary to further analyze the environmental effects of the proposed action.

DECISION/RATIONALE: It is my decision to approve the proposed action to authorize the construction, operation, maintenance, and termination of a buried natural gas pipeline and associated above ground connections and facilities with the mitigation measures listed below.

MITIGATION MEASURES:

1. An archaeological monitor shall be required for all trenching in the floodplain and first terrace areas of Douglas Creek. If resources are identified the monitor shall immediately shut down all construction activity and notify the White River Field Office Authorized Office (Field Manager or the Acting).

2. The operator is responsible for informing all persons who are associated with the project operations that they will be subject to prosecution for knowingly disturbing paleontological sites, or for collecting fossils. If fossil materials are uncovered during any project or construction activities, the operator is to immediately stop activities in the immediate area of the find that might further disturb such materials, and immediately contact the authorized officer (AO). Within five working days the AO will inform the operator as to:

- whether the materials appear to be of noteworthy scientific interest
- the mitigation measures the operator will likely have to undertake before the site can be used (assuming in situ preservation is not feasible)

If the operator wishes, at any time, to relocate activities to avoid the expense of mitigation and/or the delays associated with this process, the AO will assume responsibility for whatever recordation and stabilization of the exposed materials may be required. Otherwise, the operator will be responsible for mitigation cost. The AO will provide technical and procedural guidelines for the conduct of mitigation. Upon verification from the AO that the required mitigation has been completed, the operator will then be allowed to resume construction.

3. If it becomes necessary to excavate into the underlying rock formation, a paleontological monitor shall be required and present during the excavations.

4. Colorado One Call must be activated before excavation begins.

5. Construction will not occur during the months of December, March or April to allow for livestock movements

6. Temporary use areas (TUAs) will be situated at least 40' from the stream channel to minimize impacts on channel bank stability. No construction activity, vehicle use, or vegetation clearing would occur within this 40 feet buffer of the active channel margin (i.e., both sides of channel).In addition, a "Brush Hog" will be used to clear vegetation in areas needed for additional work space (this would allow root wads to remain intact, increasing soil stability.). TUAs will be in use only during periods of low flow (well below bank-full stage) in attempts to prevent deterioration of the flood plane on west bank. In addition, TUAs will be revegetated and debris will be evenly distributed over the area to enhance flood plain stability.

7. While boring beneath Douglass Creek, a minimum burial depth of 10' will be required in attempts to preserve confining layers. In addition, the small ephemeral drainage (dimensions 5'wide X 2' deep) on the east side of the highway will have the same burial depth requirements. At locations next to or crossing access roads, a minimum burial depth of four feet in alluvial areas and three feet in rocky areas will be obtained.

8. Flow deflectors and sediment traps (debris) will be evenly distributed over pipeline route immediately following construction to control erosion and reduce fugitive dust. Utilization of bio-degradable netting (e.g. jute) will be used if necessary to reduce erosion at the point the pipeline rout climbs the highest cut-bank to the west of Douglass Creek. There are gullies intersected by the pipeline near the highest cut-bank to the west of Douglas Creek. At these locations, the pipeline route will be armored with woody debris or cobbles to prevent accelerated gully erosion.

9. Disturbed areas will be seeded with Standard Seed Mix #1, which is well adapted to the austere site conditions, has the greatest opportunity to hold the soil, and will allow native species to move onto the site as soils develop. This seed mix has not been found to move offsite or to interbreed with adjacent native plant species. Regrowth of existing salt and alkali tolerant plant species such as greasewood, big sagebrush, Nevada bluegrass, western wheatgrass, bottlebrush squirrel-tail, and shad-scale shall be encouraged to improve revegetation efforts in Tisworth soils (east of the highway).

The seed mixture(s) shall be planted in the amounts specified in pounds of pure live seed (PLS)/acre. Commercial seed shall be certified. The seed mixture container shall be tagged in accordance with State law(s) and holder shall provide the authorized officer with a copy of the seed tags.

MIX SEED#	SPECIES (VARIETY)	LB.PLS/ ACRE	RANGE SITES
#1	Siberian wheatgrass (P27) Russian wildrye (Bozoisky) Crested wheatgrass (Hycrest) Alternates: Fourwing saltbush, Nutall's saltbush,Winterfat,Annual Sunflower, Western wheatgrass	3 2 3	Alkaline Uplands, Badlands, Clayey 7"-9", Clayey Salt Desert, Cold Desert Breaks, Cold Desert Overflow, Gravelly 7"-9", Limey Cold Desert, Loamy 7"-9", Loamy Cold Desert, Loamy Salt Desert, Saline Lowland,Salt Desert Breaks, Salt Flats, Salt Meadow Sands 7"-9", Sandy 7"-9', Sandy Cold Desert, Sandy Salt Desert, Shale 7"-9", Shale/Sands Complex, Shallow Loamy, Shallow Sandy,Shallow Slopes, Silty Salt Desert, Silty Swale, Steep Slopes

Seed shall be planted using a drill equipped with a depth regulator to ensure proper depth of planting where drilling is possible. The seed mixture shall be evenly and uniformly planted over the disturbed area. Where drilling is not possible, seed shall be broadcast and the area shall be raked or chained to cover the seed. When broadcasting the seed, the pounds per acre noted are to be doubled. The seeding will be repeated until a satisfactory stand is established as determined by the authorized officer. Evaluation of growth will not be made before completion of the second growing season after seeding. The authorized officer is to be notified a minimum of two days prior to seeding of the project.

10. The permit holder is required to control noxious weeds resulting from this project. Use of herbicides is to be in accordance with the label and approved in advance by the authorized officer.

11. The applicant shall be required to collect and properly dispose of any solid wastes generated by the proposed actions.

12. Paint all above ground facilities Juniper Green.

COMPLIANCE/MONITORING: Compliance inspections will be preformed by the White River realty staff every five years.

NAME OF PREPARER: Linda Jones

NAME OF ENVIRONMENTAL COORDINATOR: Vern Rholl

SIGNATURE OF AUTHORIZED OFFICIAL: Vern Rholl
for Field Manager

DATE SIGNED: 5/24/05

ATTACHMENTS: A-1 Map and A-2 aerial photo